

09/699,39200AB123**REMARKS**

Claims 1-27 are currently pending in the subject application and are presently under consideration.

Applicants' representative notes with appreciation the allowance of claims 15-27, as well as the indication that claims 4-14 would be allowable if recast in independent form to recite respective base claims and any intervening claims. It is believed such amendments are not necessary in view of the below-noted deficiencies of the cited reference. However, applicants' representative reserves the option to recast such claims at a later date if necessary.

Favorable consideration of the subject patent application is respectfully requested in view of the comments herein.

**I. Rejection of Claims 1-3 Under 35 U.S.C. §102(e)**

Claims 1-3 stand rejected under 35 U.S.C. §102(e) as being anticipated by Yuzawa *et al.* (6,557,106). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Yuzawa *et al.* does not teach or suggest each and every limitation as recited in the subject claims.

A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The claimed invention relates to a system for identifying valid connections between components of an electrical system and for preventing damage which may be caused as a result of invalid connections. Currently, conventional systems rely on the use of different types of connections and wirings to ensure proper mating between bus ports. Applicants' novel invention aides in the reduction of manufacturing and maintenance costs of configured connection ports and cables by allowing the use of the same type of cable for different types of connections in a PLC system. In addition, use of horizontal space on a local rail is minimized by using a multi-

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wired cable which extends the system bus logically but not physically. To validate that all multi-wired cable connections are appropriate, the subject invention generates a pre-specified voltage level when the cable is properly connected between two electrical components and at least one of the components is powered up. Each of the components test for the presence of the pre-specified voltage level. When either of the components detects that the desired voltage level is not present, that component asserts an error signal. Specifically, independent claim 1 recites a method of validating the connection of a multi-wired cable between first and second electrical components.

Yuzawa et al. does not teach or suggest validating the connection of a multi-wired cable between first and second electrical components. Rather, the cited reference teaches a device controller for controlling a supply of power to a PC card inserted into a slot of a personal computer. (See Yuzawa et al., col. 1, ln. 14-15). Specifically, an input/output (I/O) device controller supplies power to the PC card. (See Yuzawa et al., Abstract). Further, Figure 9 of Yuzawa et al. discloses a device driver to "power on" the PC card by programming bits, utilizing power lines (See Yuzawa et al., col. 13, ln. 55-60), and later performing a check to determine whether the power supply is normal. (See Yuzawa et al., col. 13, ln. 65-67). Thus, while Yuzawa et al. suggests detecting an abnormality in the supply of operating power to a PC card via power lines (See Yuzawa et al., Abstract), it is silent towards validating a multi-wired cable connection between two electrical components.

Accordingly, it is readily apparent that Yuzawa et al. does not teach or suggest each and every limitation as recited in independent claim 1, from which claims 2-3 depend, and this rejection should be withdrawn.

09/699,39200AB123**Conclusion**

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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